

The information professionals and line managers had reached an impasse, each group accusing the other of inept management. Here's how one leader was trained to help his group break the pattern.

Education for Leading-Learning

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Learning is an idea in good currency. The quality of learning within a company yields an "intellectual capital," crucial in building an organization that is vigilant about detecting and correcting errors, dedicated to producing innovations, and ready to change to meet the demands of the environment, which itself is often changing.

Two types of learning are necessary in all organizations. The first is single-loop learning: learning that corrects errors by changing routine behavior. It is incremental and adaptive, something like a thermostat that is set to turn on the heat if the room temperature drops below 68 degrees. The second is double-loop learning: learning that corrects errors by examining the underlying values and policies of the organization. Picture, if you will, an "intelligent" thermostat that can evaluate whether or not 68 degrees is the right temperature for optimum efficiency. (In a recent article in this journal, Michael McGill, John Slocum, Jr., and David Lei call it *generative learning*.)

Double-loop learning is rare in most organizations. If it is to be nourished, it requires leaders who continually model it and reward it, especially under conditions where the problems are difficult, embarrassing, and

threatening. Unless the leaders behave consistently with double-loop learning when it requires courage to do so, double-loop learning will not be credible.

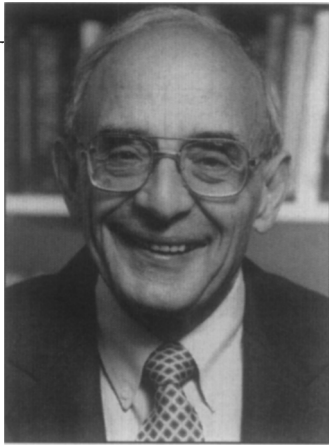
The purpose of this article is to focus on the actual leadership behaviors required to lead and to learn. This is why I call it education to produce the competence of *leading-learning*. By the way, the knowledge and the skills required for double-loop learning can be used, with easy modification, for single-loop learning. The opposite is not true.

SOME KEY ASSUMPTIONS OF EDUCATION FOR LEADING-LEARNING

1. Learning should be in the service of action, not simply discovery or insight. The evidence that managers know how to lead-learn is that they can produce action based on double-loop reasoning.

2. The competencies involved in leading-learning are the same when dealing with individuals, groups, intergroups, and organizational features such as culture.

3. The first key to leading-learning is not personality or style. Rather, the key is the "theories of action," the set of rules that indi-



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viduals use to design and implement their behavior. Human beings with a wide variety of personalities and styles do not seem to vary in the theories for action that they hold.

For readers who are not familiar with the research cited at the end of the article, the reasoning behind this claim is as follows. Since 1974, my colleagues and I have studied some 6,000 individuals varying in age, sex, minority status, education, wealth, and position. This group contained predictable variations in terms of personality and leadership style. Among 6,000 individuals, one might well predict similar variance in learning competencies. Yet, they all seem to have the same difficulties in dealing effectively with double-loop problems. There must be some causal factors common to these different human beings.

Moreover, we have worked with about 2,000 individuals, members of organic and stranger groups, to help them become more effective. Again, in a number this large, we would expect variance in personality and style. Yet the interventions that led to lasting changes (changes that persevered a minimum of five years and, as of this writing, a maximum of fifteen years) were designed to *ignore* personality and style.

Again, such results suggested that a common set of causal factors was at work. After theorizing from our data, we concluded that the common factor was the master programs that individuals held about how to deal with difficult, double-loop problems. These master programs, or theories-in-use, "told" individuals how to design their actions and implement their designs. All insights, understandings, attitudes had to "pass through" the theory-in-use in order to become actionable. This is why, we suggest, it is possible to educate individuals to lead-learn by helping them to develop new master programs for action.

The second key to effective leading-learning competencies is found in the reasoning processes that a person must use if he or she follows the dictates of the master programs, or theories-in-use. It appears, so far, that most individuals use master programs that systematically require defensive reasoning. It took us several years and several thou-

sand cases to conclude that, for some reason, most of us have learned (early in life) a theory-in-use whose *effective* implementation requires actions that are *counterproductive* for double-loop learning. As you will see in the case example that follows, the actors created all sorts of misunderstandings, defensiveness, and errors by following faithfully the theories-in-use they held for dealing with difficult issues.

4. Leadership education that focuses on theories-in-use and reasoning processes is more easily integrable with such managerial disciplines as strategy, managerial economics, management accounting, and management information systems. This is because these disciplines are themselves theories of action intended to help managers achieve specific goals. Moreover, their effective use requires productive reasoning. Managerial disciplines, in principle, eschew defensive reasoning.

If the intellectual structure, architecture, and reasoning processes required for leading-learning are the same as those embedded in the managerial disciplines, then integration will be much easier. If true, we will stop labeling the competencies related to human beings as "soft" and those related to the managerial disciplines as "hard." Indeed, such a distinction may well be based on soft reasoning.

THE GENERIC CHARACTERISTICS OF THE EDUCATIONAL EXPERIENCES

To date, our research has helped us identify five characteristics that should be included in educational experiences for leading-learning.

1. The learning should be based on the use of a real-life problem that requires—relatively soon—action and implementation. Discovery, insight, and the development of a proposed solution are necessary, but not sufficient. Without the requirement of taking action, the theories-in-use are not activated.

2. The effective implementation or action should be directly connected to the participants' competence and skills, as well as to the

effectiveness of the unit in which they work.

3. The problem should be difficult and non-routine, preferably requiring innovative thinking and action. It should be such that a failure to take action would be potentially or actually embarrassing or threatening.

4. It should be a problem about which the participants *can* take action. Or, the problem can focus on gaining permission from the powers that be to take action.

5. The lessons about leading-learning should be usable to solve future problems (technical or human) similar or dissimilar to the one being used as the vehicle for learning. For example, the line-staff conflicts around management information systems problems used in this article should lead to effective solutions for any line and staff conflicts.

THE TYPE OF DATA USED FOR LEADING-LEARNING

It took us several years to realize that the type of data used as the learning vehicle is crucial. In order to get at theories-in-use and defensive reasoning, the data must be as directly observable as possible. Conversations or meeting dialogue are good examples. Data that are inferences from talk do not activate the theories-in-use. Moreover, generalized stories of what happened are inadequate, in that these do not provide data from which the listeners can make up their own minds as to what was said. For example, President Nixon told a different story about the Watergate tapes than the tapes themselves told. Our judicial system is based on the notion that all human beings are equal before the law. This equality is created by focusing on what actually happened.

It follows that the most effective educational programs are based on data that the participants produced before or during the educational experience. Not only do such data connect with the participants' theories-in-use, the data also help to hold the participants personally and causally responsible for what happened. It is this sort of data that make it difficult for human beings to wiggle

out of their causal responsibilities, even if they are good at such fancy footwork.

AN EXAMPLE OF A CASE USED FOR LEARNING

We have found that two different types of cases meet the criteria above. One is the use of an actual problem that the participants must solve. I will focus on such an example in a moment.

Limiting the learning vehicle to such episodes, however, limits the scope and value of the educational experiences. Therefore, we have developed a second case method in which participants reconstruct dialogue from recent experience. I will return to it later.

For now, let's consider the actual-problem approach, using the situation of a chief information officer (CIO) who came under fire from line management. In essence, the top line charged that the information professionals were not providing services in a timely manner. Moreover, the line managers felt that the information professionals were "techies" who simply weren't concerned with the pressures the line was facing. If things didn't change, the line was prepared to cut budgets and people. If necessary, they would reorganize the function around the leadership of a line executive.

The CIO had made several attempts to solve the problem. All failed. As he and some of his subordinates said:

Our meetings went in circles.

There was a lot of wheel spinning.

Our sessions were loaded with people who had strong egos.

We got nowhere even though many of us tried hard.

This case meets the criteria defined above. It is an important business problem and it involves staff-line issues that occur frequently in organizations. There is the definite possibility of embarrassment and threat if the

issues are not resolved. The individuals' and the unit's sense of competence and performance are directly involved.

The CIO decided that he needed professional help and invited a facilitator to provide assistance. The CIO and the facilitator agreed that they wanted to hold a one-day, off-site session—one last attempt at solving the problem. (Actually, the choice of site is immaterial; the same process would apply in either location.)

How the Meeting Began

The CIO opened by telling his subordinates that he had received a read-our-lips order from line management: cooperation was nonexistent; the information professionals were providing minimal value added, despite higher budgets.

He then said, "I want to discuss with you our ability to react to users' needs and the fact that we are always having difficulties with line management. They, after all, are our customers. We must be concerned about meeting their needs." The information professionals responded:

We *are* concerned about their needs. The big trouble is that they do not know what they want.

When they do [know what they want], they have no idea how long it will take to provide them with high-quality services. They want everything yesterday.

Several other professionals added that they had "had it up to here" with line management's complaints. The problem would be easily solved if the line gave them the people and resources they truly needed.

The CIO expressed empathy with their frustrations and anger, and suggested that they might begin to turn things around by developing "a credible plan to respond to their needs." The professionals responded in the following way:

- There is no sense in planning. Our

users don't plan. Anyway, we are convinced that just about the time we think we are on top of things, they will make more demands and complain about what we are failing to do.

The CIO replied with:

- But since we do not have a solid plan we cannot review the way we are managing our resources. . . . As I see it, we have two choices. The first is to do what we are now doing—and I believe that will be disastrous. The second is to break out of this mold: change the way we do business.

Members of the group countered by arguing that there was no way to change line management. As one said, "If you want to try, good luck." The CIO rebuffed this with, "If planning isn't the way to go, how do you propose to solve the problem?"

The information professionals responded with increasing emotion. They said, in effect: (1) the problem is not solvable because line management makes impossible requests and (2) the information professionals were already killing themselves. "That's why the good people are leaving," said one individual. "I agree," said another, adding, "It is not fixable."

The CIO was virtually at the end of his patience. "We have to fix it, because we have no choice. Otherwise, we are not being responsible."

What's Going on Here?

One way to describe these events would be to say that the information professionals are expressing frustration and mistrust. They are angry. If I presented the entire case, I could illustrate that the line harbored similar feelings. Thus, we have, I believe, a familiar example of staff-line conflicts, of tunnel vision, of superior-subordinate misunderstandings, of poor problem solving, and (probably) of organizational defensive routines that reinforce these features.

If the problem is framed in these terms, the workshop would likely focus on helping the participants vent their feelings. The facilitator would encourage them to be candid and to "tell it as it is." The catharsis, if facilitated competently, would help the participants to

see that the other side was as frustrated and angry as they were, that both sides were more well-intentioned than either side thought, and that a basis existed for resolving many of the problems.

The catharsis-insight approach works most efficiently with those who participate in the workshop; it has little impact on anyone else.

I should like to up the ante. I should like to suggest ways by which we can make the beneficial results reach beyond the participants. I should also like to make the newly developed senses of understanding and trust become transferable to other episodes with other groups, and with other difficult, embarrassing, or threatening problems. In order to accomplish these objectives, we will have to explore a different view of what happened during the meeting.

A Theory-of-Action Perspective

Our definition of the situation, as presented above, views the group's actions as counterproductive. This implies that the participants lack the skills to act productively. Therefore, they should be taught the requisite skills.

Another view is that the participants do, indeed, lack the skills to act productively. However, their counterproductive actions are actually highly skillful. They are skillful at acting counterproductively. If this is true, we have to help them to surface and examine the values, beliefs, and skills that they currently hold. In doing so, they can confront whatever it is that creates the behaviors inhibiting learning and effective action.

Under this view, the frustration and anger are the results of skillfully counterproductive actions. They are not the causes. If this is true, then catharsis and insight may help the players to see their misunderstandings and miscommunication. But this avenue would bypass the designs that they have in their heads, and these designs are what produce actions that are skillful, automatic, and counterproductive.

At best, the catharsis-insight approach helps the players to realize that they are all

“good guys” even if, at times, they do not act as competently as they wish. Armed with this knowledge, it is less likely that the same individuals will continue to get as frustrated and angry with each other as they did at the outset. This leads to progress.

Since the situations are now less threatening, the designs the participants hold about how to deal with difficult, embarrassing, and threatening issues are not as likely to be activated. Since those designs lead, ultimately, to anger and resentment, emotions are less likely to flare. Or, if they do, someone might invoke “the spirit of the workshop” to re-induce some of the cooperation they experienced during the exercise. But that is difficult to do with individuals who were not present. Nor is it likely to have much effect on individuals who were present, but who have developed new grievances. The designs and the skillful counterproductive actions remain latent, to be activated the moment difficult and threatening situations present themselves.

Defense by Design

The idea that human beings have designs in their heads about how to act effectively dates back at least to Lewin’s concept of life space and Simon’s concepts of design. In the past two decades, the concept of design has penetrated much of the cognitive-clinical-social psychological research at an increasingly accelerated speed.

Put simply, a design is like a master program that individuals store in their heads to shape and implement their action. Donald Schön and I call such designs theories-in-use to differentiate them from theories that human beings believe in or espouse. We found, to our initial surprise, that most human beings, regardless of age, sex, economic or educational status, and culture used the same design or theory-in-use to deal with difficult and embarrassing or threatening issues. They may act differently, but their behavior is consistent with (explained by) the same theory-in-use. We called this design or theory-in-use Model I.

The theory-in-use has four governing values. They are: (1) be in unilateral control, (2)

strive to win and not to lose, (3) suppress negative feelings, and (4) be as rational as possible. The action rules that go with these values become apparent when people want to advocate their views or make evaluations or attributions. They will do so in ways that are consistent with the governing values. For example, one action rule can be expressed as: “Strive to make evaluations and attributions in ways that do not encourage inquiry into or testing of the validity of the claims.” Another might be: “Craft your conversation in ways that, in order to test the validity of your claims, others will have to use the same logic that you used to produce the claim in the first place.” These are recipes for self-fulfilling, self-sealing, anti-learning processes. They are the hallmarks of defensive reasoning.

Focus on the Way Action Is Crafted

The first step is to help individuals examine the ways that they crafted their conversation. The objective is to help them see to what extent the behavior was consistent with Model I and the extent to which their reasoning was defensive. That is not difficult to do. Individuals can learn to analyze and “score” their conversation with little difficulty. Take a close look at the conversation above. It is filled with unillustrated, untestable evaluations and attributions about line management that did not encourage inquiry. For example:

- Line do not know what they want.
- They make demands with unrealistic deadlines.
- If we meet their demands, they will follow up with more unrealistic demands.
- The problems are unfixable because of line management’s recalcitrance.

Conversation crafted in this manner will lead to self-fueling, counterproductive consequences.

The conversation is not crafted this way because of frustration or anger. It is crafted this way because that is what the theories-in-use “tell” them to say. It is possible, for example, to help the participants craft conversation that is more productive for learning, even though they are frustrated and angry.

Before I illustrate this, I should like to highlight one other feature of the Model I theory-in-use.

The CIO's Private Conversation

When human beings are in settings where they have to communicate negative information and wish to minimize the defensiveness of others (and of themselves), they often act diplomatically. They focus on saving face. They strive to act concerned and caring. Their theory-in-use about how to do that is to bypass what may be threatening and to ease into the problem—and to cover-up that they are doing so. Otherwise, the easing-in would be threatening and not a bypass. In order to act this way, human beings often carry on private conversations with themselves while they are designing and implementing their public conversation.

The CIO did that. He wanted to get the subordinates to be cooperative; he wanted to minimize the likelihood that they would see him as unfair and judgmental. Unlike his subordinates, he censored his evaluations and attributions and acted as if this were not the case. Asked to write out the private thoughts and feelings, he cited the following:

- These guys act like a bunch of babies.
- They do not realize how insensitive and opinionated they are.
- Sometimes I feel that I should read the riot act to them. They've got to wise up or all of us will lose.

When I asked him what led him not to make these thoughts and feelings public, he looked astonished. "If I said these feelings and thoughts, all I would have done was add fuel to the fire." He was correct. His private thoughts and feelings were crafted in the same counterproductive manner as was his public conversation.

This self-created censorship rarely works for another reason. When some of the professionals were asked if they had any idea of their boss's private thoughts, they responded with words that were almost identical to the ones the CIO used. When they were asked what led them not to say so, they responded

with the same look of astonishment. "Are you kidding," said one of them, "that would make things worse." Quite likely, the subordinates were also carrying on internal monologues that were not vocalized.

Thus, we have people holding private conversations about each other and thinking that others do not hear these conversations. In actuality, the others do hear them but act as if they do not. We can see how defensive reasoning leads to concealed self-censorship, and that, in turn, leads, at worst, to the wrong learning; at best, to a highly limited learning organization.

Productive Reasoning

Effective leading-learning requires the use of productive reasoning in crafting talk and taking action. Productive reasoning leads to talk whose premises are explicit. The talk is crafted in such a way that it is possible to test the validity of the claims being made by using logic and data that are independent of those making the claims. What would the CIO say to deal with the subordinates' defensive reasoning if he were to craft his talk on the basis of productive reasoning?

First, he would *not* carry on the type of private conversation just described. This was the product of defensive reasoning. Second, he would focus on the way the subordinates' crafted their talk, i.e., how they crafted their arguments (not their motives). When, for example, he heard the subordinates say, in effect, that the line managers "do not know what they want," he would carry on the following conversation with himself.

- These individuals are making evaluations of (and attributions about) the line's intentions without providing any data that I, or any other individual, can use to make up my own mind on the validity of their claims.

- I should ask them to provide data to illustrate their claims. I have learned not to ask them "why" they believe what they do, because that will activate even more abstract explanations that could be self-serving.

Therefore:

- When the subordinates say: Line does not know what they want.

- The CIO could say: What is it that they say or do that leads you to conclude that they do not know what they want?

When the CIO tried something like this, the subordinates gave descriptions that were full of gaps, inconsistencies, and misinterpretations. The CIO was able to focus on these. Moreover, the conversation led to the insight that there were times when the line managers truly didn't know what they wanted. They hid that from the information specialists, either because they were embarrassed or because they felt certain that if they admitted not knowing, the information people would say "gotcha."

Consider one more example of this type of action:

- When the subordinates say: Line does not trust us or really care for us.

- The CIO could say: Have you tested out your assumptions about their views of us? If so, what did you say? If not, what led you not to do so?

When the CIO asked these questions, the subordinates responded with, "Are you kidding? That would be disastrous. They would either laugh or get furious." The CIO could then say, "I ask you if you have tested the validity of your assertions about the line. The answer I get is another set of untested assertions. I cannot be an effective representative of our views with line management if I come to the meetings armed with a bunch of untestable assertions."

The subordinates could also use the same strategy with the CIO, with each other, and with the line. The point is that this new strategy can be used to deal with any business issue that is embarrassing or threatening, and in which the "wheels are spinning," pulling the participants deeper into self-fueling, anti-learning, and overprotective behavior.

So far, some of these actions may be familiar to those who focus on experiential learning. Illustrating and testing attributions is probably not new to them. What I believe is new, however, is helping the participants discover their respective theories-in-use—the designs that lead them to speak and act defensively. Such an inquiry would lead them to

examine their underlying values: *not* the ones that they espouse, but the ones that they actually use.

Changing actions without changing the values implicit in the theory-in-use is a recipe for gimmickry. The conversations above are underpinned by such values as *be in unilateral control* and *win, do not lose*. Helping the individuals to craft their conversations as described above without changing their values and reasoning processes will result in individuals using actions that produce, at best, limited learning. Of course, they would not make that explicit. The result is manipulation covered up by gimmicks.

The governing values of the alternative theory-in-use (Model II) are: (1) act in ways to produce valid information and informed choice, and (2) make an internal commitment to vigilantly monitor your actions in order to detect and correct error. The action strategies are "advocate, evaluate, or attribute in ways that encourage inquiry into and the testing of your views." Model II would lead to relatively tough examination of what is going on. Easing-in would be minimized.

This does not mean that to be honest is an end in itself. The idea is to be honest and candid in such a way that others can be the same. Also, it means that we would eventually learn not to have private thoughts and feelings that are counterproductive to learning. We have to learn to think differently about others and ourselves.

The CIO could say to the subordinates:

- If it is true that the users are the problem because they do not plan and make last-minute demands, and if it is true that they have been doing this for years, then if we increased the resources, would that not reinforce the very behavior that we find frustrating?

or

- You tell me that our clients are inflexible and insensitive. That may be true. But how do you know? The only answer I get is that you say they are (illustrates with examples of what the subordinates have said). I want these attributions and evaluations exposed to tough tests that are independent of your reasoning.

- I will not go along with causal reasoning, yours or mine, whose validity is not tested independently of our views and experiences.

The CIO could also cite actions illustrating the possibility that the subordinates are creating the very consequences they condemn. The CIO might say:

- You state that our users (customers) are inflexible and insensitive (cites illustrations of such claims). You do not like this behavior, and you use it as evidence that the problems are not correctable.

- You may be correct, but I do not hear anyone presenting a compelling argument that is testable. This leads me, at the end of the first hour, to feel that *you* are inflexible and insensitive. Whenever I have tried to make some suggestions, the responses that I hear from you include “good luck to you,” and “trust us, our users are uninfluenceable.”

- It is difficult for me to trust your diagnosis. If you act toward them the way you are acting toward me, I can see how they would become, in your eyes, uninfluenceable.

and

- This leads me to another issue. You may be experiencing me as uninfluenceable. I want to seek to establish conversations that do not require me to distance myself from my and your responsibility for the problems.

- I want to explore what I am saying or doing that makes me, in your eyes, uninfluenceable.

Initially, the subordinates saw these conversations as tough and confronting. They were seeking a sense of support from the CIO. He could have said, for example, that he empathized with them, that he cared for them. This is consistent with the Model I concept of support. If the CIO had done so, he would have helped the subordinates feel good about themselves and more secure in their relationship with him. But, the CIO would have had to cover up his views or retreat to the ritual of first saying “positive” things, then easing into the “negative.”

There are at least two problems with such a strategy. First, it leads to a lack of credibility. The subordinates hear the positive as a pre-

lude to the negative—often called the “however-but” moment. Second, it means that he is crafting his conversation in order to please them. This, in turn, means that they are managing him, that their anxieties are controlling his script.

A Model II perspective of support and caring is different. The idea is to increase the others’ capacity to examine their defensive reasoning and the unrecognized negative consequences. The sign of caring is to say, in effect, “I trust that you have the capacity to face up to any gaps and inconsistencies in the way that you reason.” This is what the CIO was asking his subordinates to do when he surfaced the double binds they were creating for him and ultimately for themselves. He showed the deepest type of respect for them. Instead of dodging the root issues, he attributed to them a high capacity for self-reflection and self-examination. He was modeling leading-learning.

MAPPING THE ORGANIZATIONAL DEFENSIVE ROUTINES

We have found that when organizations are largely populated with individuals who use Model I theories-in-use and defensive reasoning, they create larger defensive routines that, at best, make the organizational context one of enabling limited learning. These organizational defensive routines take on a life of their own. They become supra-individual. They coerce and reward actions that limit the very learning that leading-learning requires. Developing skills to craft conversations in more learning-supportive modes is not going to be particularly powerful if the organizational defensive routines are not reduced significantly.

From the notes taken during sessions such as we have described, and from tape recordings of these sessions, it is possible to construct maps of these organizational defensive patterns or routines. These maps provide the basis for the necessary organizational changes. I call these *action maps* because they purport to describe the organizational context that inhibits learning.

An action map begins by describing the conditions that govern the context (see Exhibit 1). In this case, there are pressures from users and tight financial resources. Next, the map describes the major action strategies that the boss (CIO) and the subordinates (information professionals) use to deal with each other. These action strategies are taken directly from the analysis of the public and the private conversations.

For example, the CIO sees the subordinates as too reactive, defeated, and performing poorly. The subordinates, on the other hand, see the CIO (and line management) as unfair; line managers do not care for the information professionals. These views are held strongly and crafted in ways that are not genuinely testable.

The first-order consequence is that the boss believes the subordinates' solutions are unrealistic. Either they come up with better ones or use his. The subordinates view the boss's solutions as unrealistic. They conclude that the problems are unsolvable.

The second-order consequence is that each creates a double bind for the other. The boss's double bind for the subordinates is implicit: either they agree with him and feel failure, or not agree and feel failure. The subordinates double bind for the superior is similar: either he agrees with them and gets in trouble with the line, or he cooperates with the line and gets in trouble with them.

This leads to a third-order consequence: namely, it makes the embarrassing and threatening business issues undiscussable and uninfluenceable. This, in turn, leads to a fourth-order set of consequences: the self-reinforcing and self-sealing processes of mistrust, cynicism, and low confidence that anything will ever be solved.

Every consequence feeds back to reinforce the previous consequence. Consequently, we have a pattern that is ultra stable and that produces a highly limited learning organization. This map tells the participants that they are *all* responsible for creating the organizational defensive pattern. Unless this pattern is altered, it is unlikely that planning, new systems, and courses in communication skills will lead to

any lasting solutions. Nor is it likely that the participants will have learned how to learn. Nor is it likely that they will create an organization that encourages effective learning around the difficult and "hot" problems.

The organizational defensive patterns, in our experience so far, cannot be changed by making some structural change, such as a new policy or a better reward system. The rewards will not act as incentives if human beings do not hold the theories-in-use and the requisite skills to reduce organizational defenses.

We find that as human beings strive to learn the new skills, they immediately face the reality of whether the skills would be accepted by the current organizational culture. The answer is typically that they would not be. Hence, they have compelling reason to begin to dismantle the defensive organizational architecture.

It does not take much time to develop a view of a new organizational culture. It takes more time to make it part of the living culture. Typically, it takes as much time to learn the new skills and to reduce the defensive routines as it does to learn to play a middling game of tennis. The key to success is practice: practice with real problems under everyday conditions.

OTHER WAYS TO ACCOMPLISH SIMILAR LEARNING

We have developed a rather simple, straightforward case approach that helps participants develop learning skills. It takes about 25 to 35 minutes to complete and can be based on any real problem that is currently involving the writer.

In one or two sentences, the writer defines the problem. For example, "overcoming resistance to the introduction of a new strategy." In several sentences, the writer then describes how he or she would go about beginning to solve the problem. For example, "hold a meeting with a key or several key individuals where the objective is . . ."

Finally, the writer splits the page in half.

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On the right-hand column, he writes a conversation of what he would say and what he believes the other(s) would say. Or, if the incident has already occurred, she would write what she actually did say and what the others actually said.

On the left hand side of the column, she would write her internal monologue, the thoughts and feelings that she would have had (or did have), but did not communicate for whatever reason. The writer would keep this scenario or "play" going for two or three double-spaced, typewritten pages.

This scenario fulfills the requirement for relatively directly observable data. It is the basis for helping learners get a window into their theories-in-use and into their reasoning processes. The left hand column gets at the private conversations.

In describing an incident that may occur or has occurred, it is not necessary that the conversation be absolutely accurate. The objective is to infer the theory-in-use. If our theory is correct, whatever talk one recalls or projects will, of necessity, be informed by the person's theory-in-use. It is not possible for someone to write a genuine conversation informed by a theory-in-use he or she does not hold. In the thousands of times that we have used this case method, only one individual, after doing a lot of homework, wrote a Model II case.

The cases form only a part of the bases for learning. Next, the participants take turns acting as consultants to the case writers, to help them analyze their cases and suggest more effective ways of communicating. The conversation in which the consultants try to advise the writer, together with the conversations in which participants discuss each others' ideas, form another crucial basis for learning. By reflecting on the conversations, participants discover that it is possible to get a window into their respective theories-in-use and reasoning processes.

The case method can be used in many different ways. For example, one of my prior articles in this journal described how organic teams of top executives met to formulate their respective business strategies. Each partici-

pant wrote a case in which he or she expected resistances to the new strategy. Such learning typically expands. The group asked to return about six months later in order to assess the effectiveness of the implementation of their strategies. They wrote cases about difficult encounters they had during the implementation phases.

We have also used the case with participants who do not know each other. Each used a problem that was important in her or his setting. For situations in which it is not appropriate to ask participants to write their own cases, we have developed cases that they can use. The power of the learning, under these conditions, comes from the ability to develop cases that illustrate generic problems, and from the discussion that follows. (Individuals who participate in such experiences often ask us to design a program for their own group (or company) where they can write their own cases.)

An example from a seminar on activity-based cost accounting illustrates how a generic case study can be effective. My colleague, Professor Robert Kaplan, first introduced the participants (senior financial officers) to activity-based concepts, and I followed by introducing them to ideas such as presented in this article. We then used a case written by Professor Kaplan that described a successful ABC analysis whose implementation was resisted by the organization. We used that case to get a window into the participants' theories-in-use and reasoning. Afterwards, several participants expressed an interest in having us design a similar program for their own organizations.

CONCLUSION

The basic requirements for an effective leading-learning experience include (1) a real problem that requires solution and implementation of the solution, (2) a description of the problem that includes actual (or proposed) conversations, and (3) an accompanying scenario of the thoughts and feelings not discussed.

The context of the learning experience is the discussion of the case. The first focus is on analyzing the conversation in order to get at the theories-in-use and the defensive reasoning of the participants. The second focus is on the conversation the participants craft as they attempt to help each other become more effective. The third focus is upon the group dynamics and problem-solving processes created during the discussion. The fourth focus is on the resulting organizational defensive routines.

It is important to note that the objective of learning how to craft conversation is not to select the right words. The purpose is to learn to select the action strategies and values that will facilitate leading-learning. For example, whatever words are used, they

should be crafted in ways that encourage inquiry and testing.

The learning experience is largely composed of diagnosing the above and then practicing new ways to craft conversation using a Model II theory-in-use. Practice is the key ingredient. It begins during the seminar and continues in real-life settings in the organization.

If you wish to make photocopies or obtain reprints of this or other articles in ORGANIZATIONAL DYNAMICS, please refer to the special reprint service instructions on page 80.



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